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* * * * * * * * * * *   Welcome to STN International   * * * * * * * * * * *
* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

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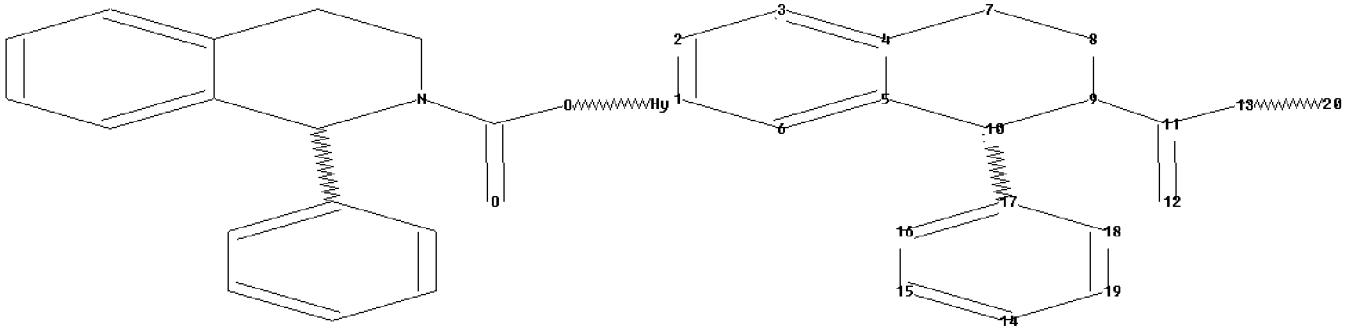


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11  12  13  20
ring nodes :
1  2  3  4  5  6  7  8  9  10  14  15  16  17  18  19
chain bonds :
9-11  10-17  11-12  11-13  13-20
ring bonds :
1-2  1-6  2-3  3-4  4-5  4-7  5-6  5-10  7-8  8-9  9-10  14-15  14-19  15-16  16-17
17-18  18-19
exact/norm bonds :
4-7  5-10  7-8  8-9  9-10  9-11  11-12  11-13  13-20
exact bonds :
10-17
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  14-15  14-19  15-16  16-17  17-18  18-19
isolated ring systems :
containing 1 : 14 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:CLASS  12:CLASS  13:CLASS  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom
20:Atom
Generic attributes :
20:
Number of Carbon Atoms : 7 or more
Number of Hetero Atoms : Exactly 1
Type of Ring System    : Polycyclic

Element Count :
Node 20: Limited
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L1      STRUCTURE UPLOADED

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L1              STR
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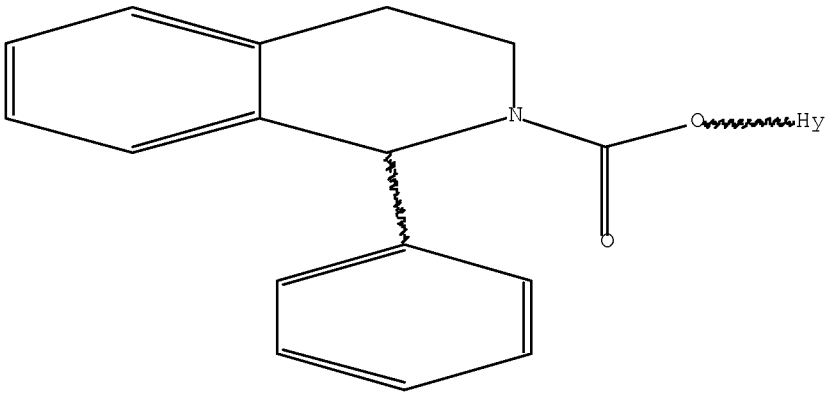

Structure attributes must be viewed using STN Express query preparation.

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=> s l1 full
L3            89 SEA SSS FUL L1

=> file caplus

=> s l3
L4           187 L3

=> s l3 and pd< feb 2003
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       23718371 PD< FEB 2003
                  (PD<20030200)
L5           12 L3 AND PD< FEB 2003

=> dis l5 1-12 bib abs hitstr

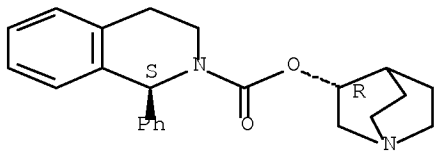
L5   ANSWER 1 OF 12  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2003:734131  CAPLUS  Full-text
DN   140:349942
TI   SVT-40776, a new selective M3 muscarinic antagonist: human receptor
     binding profile and bladder effects in the guinea pig
AU   Salcedo, C.; Balsa, D.; Enrich, A.; Davalillo, S.; Pellicer, T.; Lagunas,
     C.; Catena, J.; Fernandez-Serrat, A.; Farrerons, C.; Fernandez, A. G.
CS   Laboratorios SALVAT, Spain
SO   Neurourology and Urodynamics (2003), 22(5), 382-384
     CODEN: NEUREM; ISSN: 0733-2467
PB   Wiley-Liss, Inc.
DT   Journal
LA   English
AB    The study aims to determine the effect of SVT-40776, a novel substituted
      quinuclidine derivative with high M3 receptor affinity, on the different human
      muscarinic receptors through radioligand binding assays and to evaluate its
      activity on the intra-vesical and arterial pressure in anesthetized animals.
      SVT-40776 exhibits high affinity, in the sub-nanomolar range, for the human M3
      muscarinic receptor, being the most potent ligand among all the reference
      compds. assayed.  It also shows the highest selectivity of human M3 vs. the M2
```

subtype, among all the reference antagonists tested. SVT-40766 is the most potent compound inhibiting the bladder contractions, at the very low dose of 17.1 nmol/kg i.v.

IT 242478-37-1, Solifenacin
RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparison; human muscarinic receptor binding profile and effects on guinea pig bladder contraction of SVT-40776, a new selective M3 muscarinic antagonist)

RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:57905 CAPLUS Full-text
DN 138:100946
TI Medicinal composition for treatment of interstitial cystitis
IN Ikeda, Ken; Takeuchi, Makoto
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003006019	A1	20030123	WO 2002-JP6904	20020708 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2449922	A1	20030123	CA 2002-2449922	20020708 <--
CA 2449922	C	20081125		
AU 2002315814	A1	20030129	AU 2002-315814	20020708 <--
AU 2002315814	B2	20070531		
EP 1405638	A1	20040407	EP 2002-741446	20020708
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BR 2002010873	A	20040622	BR 2002-10873	20020708

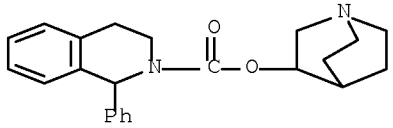
	CN 1527708	A	20040908	CN 2002-814030	20020708
	CN 1270708	C	20060823		
	ZA 2003009632	A	20041222	ZA 2003-9632	20020708
	RU 2290929	C2	20070110	RU 2004-103746	20020708
	JP 4174673	B2	20081105	JP 2003-511825	20020708
	US 20040138252	A1	20040715	US 2003-479798	20031205
	US 7335668	B2	20080226		
	IN 2003KN01677	A	20060303	IN 2003-KN1677	20031229
	MX 2004000124	A	20040521	MX 2004-124	20040107
	KR 874815	B1	20081219	KR 2004-700284	20040109
	IN 2007KN02175	A	20070817	IN 2007-KN2175	20070614
	US 20090105298	A1	20090423	US 2008-3908	20080103
PRAI	JP 2001-209041	A	20010710		
	WO 2002-JP6904	W	20020708		
	US 2003-479798	A1	20031205		
	IN 2003-KN1677	A3	20031229		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

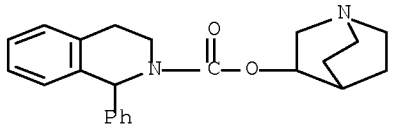
AB A capsaicin-sensitive sensory nerve depressant which contains quinuclidine-3'-yl 1-phenyl-1,2,3,4-tetrahydroisoquinoline-2-carboxylate or a salt thereof as the active ingredient. It is a remedy for a urol. disease selected among interstitial cystitis, hyperesthesia in the lower urinary tract, and prostatitis.

IT 180272-14-4 180272-14-4D, salts
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinuclidine-3'-yl 1-phenyl-1,2,3,4-tetrahydroisoquinoline-2-carboxylate and its salts for treatment of interstitial cystitis, hyperesthesia in the lower urinary tract, and prostatitis)

RN 180272-14-4 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)



RN 180272-14-4 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

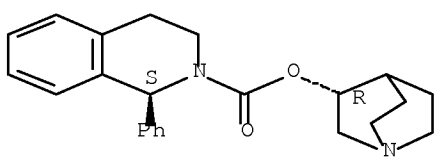
L5 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:554144 CAPLUS Full-text
DN 137:163148
TI Irritable bowel syndrome neuropharmacology: A review of approved and investigational compounds
AU Callahan, Michael J.
CS Department of Medical Affairs, Novartis Pharmaceuticals Inc., East Hanover, NJ, 07936, USA
SO Journal of Clinical Gastroenterology (2002), 35(1, Suppl.), S58-S67
CODEN: JCGADC; ISSN: 0192-0790
PB Lippincott Williams & Wilkins
DT Journal; General Review
LA English
AB A review. Anticholinergics and prokinetics are mainstays of therapy for Irritable Bowel Syndrome (IBS) patients despite their limited efficacy and troublesome side-effect profile. The clin. limitations of these drugs are a result of their relative broad and nonspecific pharmacol. interaction with various receptors. Recent advances in gut physiol. have led to the identification of various receptor targets that may play a pivotal role in the pathogenesis of IBS. Medicinal chemists searching for safe and effective IBS therapies are now developing compds. targeting many of these specific receptors. The latest generation of anticholinergics, such as zamifenacin, darifenacin, and YM-905, provide selective antagonism of the muscarinic type-3 receptor. Tegaserod, a selective 5-HT4 partial agonist, tested in multiple clin. trials, is effective in reducing the symptoms of abdominal pain, bloating, and constipation. Ezlopitant and nepadudant, selective antagonists for neurokinin receptors type 1 and type 2, resp., show promise in reducing gut motility and pain. Loperamide, a mu (μ) opioid receptor agonist, is safe and effective for IBS patients with diarrhea (IBS-D) as the predominant bowel syndrome. Fedotozine, a kappa (κ) opioid receptor agonist, has been tried as a visceral analgesic in various clin. trials with conflicting results. Alosetron, a 5-HT3 receptor antagonist, has demonstrated efficacy in IBS-D patients but incidents of ischemic colitis seen in post-marketing follow-up resulted its removal from the market. Compds. that target cholecystokinin A, N-methyl-D-aspartate, alpha2-adrenergic, and corticotropin-releasing factor receptors are also examined in this review.
IT 242478-38-2, YM-905
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(irritable bowel syndrome neuropharmacol.: approved and investigational compds.)
RN 242478-38-2 CAPLUS
CN Butanedioic acid, compd. with (1S)-(3R)-1-azabicyclo[2.2.2]oct-3-yl 3,4-dihydro-1-phenyl-2(1H)-isoquinolinecarboxylate (1:1) (CA INDEX NAME)

CM 1

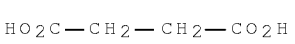
CRN 242478-37-1
CMF C23 H26 N2 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6
CMF C4 H6 O4



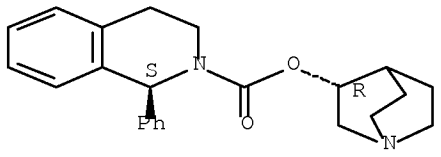
OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:525396 CAPLUS Full-text
DN 138:198423
TI M3 receptor antagonism by the novel antimuscarinic agent solifenacin in the urinary bladder and salivary gland
AU Ikeda, Ken; Kobayashi, Seiji; Suzuki, Mami; Miyata, Keiji; Takeuchi, Makoto; Yamada, Toshimitsu; Honda, Kazuo
CS Institute for Drug Discovery Research, Yamanouchi Pharmaceutical Co. Ltd., 21 Miyukigaoka, Tsukuba, Ibaraki, 3058585, Japan
SO Naunyn-Schmiedeberg's Archives of Pharmacology (2002), 366(2), 97-103
CODEN: NSAPCC; ISSN: 0028-1298
PB Springer-Verlag
DT Journal
LA English
AB The antimuscarinic profile of the exptl. drug solifenacin/YM905 [(+)-(1S,3'R)-quinuclidin-3'-yl-1-phenyl-1,2,3,4-tetrahydroisoquinoline-2- carboxylate] for the treatment of overactive bladder was compared with the commonly prescribed agent oxybutynin. In radioligand binding assays, pKi values of solifenacin for M1, M2, and M3 receptors were 7.6, 6.9, and 8.0, resp. These values for oxybutynin were 8.6 (M1), 7.7 (M2), and 8.9 (M3). Solifenacin and oxybutynin antagonized the contractile effect of carbachol (CCh) on isolated guinea pig urinary bladder smooth muscle (detrusor), displaying the neg. logarithm of antagonist apparent affinity constant (pKb value) of 7.1 for solifenacin and 7.4 for oxybutynin. To study the tissue selectivity between bladders and salivary glands, guinea pig detrusor and mouse submandibular gland cells were stimulated with CCh and monitored for intracellular Ca2+, as determined by Fura 2 fluorescence. Ca2+ mobilization of detrusor cells was inhibited equipotently by solifenacin (pKi=8.4) and oxybutynin (pKi=8.6), whereas that of the gland cells was antagonized less potently by solifenacin (pKb=7.4) than by oxybutynin (pKb=8.8), although the M3 subtype mediated both cell responses. In anesthetized rats, solifenacin (63-2100 nmol kg-1 or 0.03-1 mg kg-1) dose-dependently inhibited CCh-stimulated increases in urinary bladder pressure, while its inhibitory effects on salivation and bradycardia were apparent only at a dose of 2100 nmol kg-1. In contrast, oxybutynin within a dose range of 77-770 nmol kg-1 (0.03-0.3 mg kg-1) inhibited responses of the bladder and salivary gland slightly more potently than that of the heart. In addition, inhibitory effects of darifenacin indicated a major role of M3 receptors in the bladder and salivary gland. Therefore, M3 receptor antagonism by solifenacin could be bladder-selective. This selectivity remains to be elucidated and may provide new approaches to the pharmacotherapy of overactive bladder.
IT 242478-37-1, Solifenacin 242478-38-2, YM905
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(M3 receptor antagonism solifenacin in urinary bladder and salivary gland)

RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

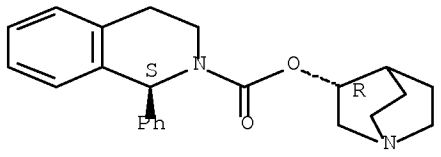


RN 242478-38-2 CAPLUS
CN Butanedioic acid, compd. with (1S)-(3R)-1-azabicyclo[2.2.2]oct-3-yl 3,4-dihydro-1-phenyl-2(1H)-isoquinolinecarboxylate (1:1) (CA INDEX NAME)

CM 1

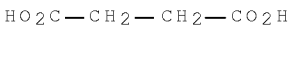
CRN 242478-37-1
CMF C23 H26 N2 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6
CMF C4 H6 O4



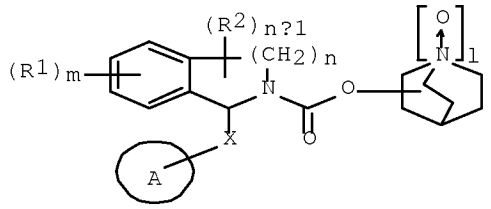
OSC.G 70 THERE ARE 70 CAPLUS RECORDS THAT CITE THIS RECORD (70 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:268535 CAPLUS Full-text
DN 136:299715
TI Quinuclidine derivatives as ciliary muscle relaxants
IN Kawamoto, Yoko; Waki, Mitsunori
PA Senju Pharmaceutical Co., Ltd., Japan; Yamanouchi Pharmaceutical Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002104968	A	20020410	JP 2000-296464	20000928 <--
PRAI	JP 2000-296464		20000928		

OS MARPAT 136:299715
GI



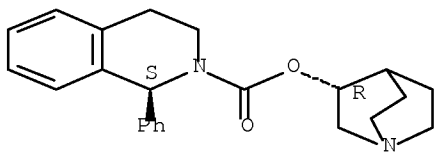
I

AB The invention provides a quinuclidine derivative I (A = cyclic aryl, cycloalkyl, cycloalkenyl, etc; X = single bond, methylene; R1 = halogen, OH, lower alkoxy, carboxyl, lower alkoxycarbonyl, lower acyl, mercapto, etc.; R2 = H, OH, lower alkoxy, lower alkyl; l = 0-1; m = 0-3; n = 1-2) or its salt or ternary ammonium compound, suitable for use as a ciliary muscle relaxant for prevention or treatment of myopia, asthenopia, and glaucoma. An eyedrop containing (1S,3'R)-3'-quinuclidinyl-1-phenyl-1,2,3,4-tetrahydro-2-isoquinoline carboxylate succinate 3, sodium monohydrogen phosphate dodecahydrate 0.1, NaCl 0.9, HCl q.s. to pH = 7, benzalkonium chloride 0.005 g, and water balance to 100 mL was formulated, and tested its effect on carbachol-induced contraction of ciliary muscle in rabbit eyes.

IT 242478-37-1 242478-38-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinuclidine derivs. as ciliary muscle relaxants)

RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

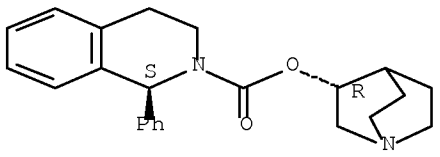


RN 242478-38-2 CAPLUS
CN Butanedioic acid, compd. with (1S)-(3R)-1-azabicyclo[2.2.2]oct-3-yl 3,4-dihydro-1-phenyl-2(1H)-isoquinolinecarboxylate (1:1) (CA INDEX NAME)

CM 1

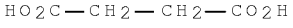
CRN 242478-37-1
CMF C23 H26 N2 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6
CMF C4 H6 O4



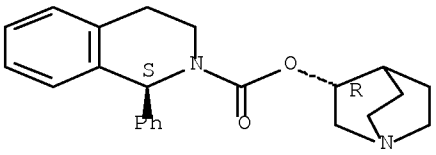
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2001:827646 CAPLUS Full-text
DN 136:145169
TI YM905, a novel M3 antagonist, inhibits Ca2+ signaling and c-fos gene expression mediated via muscarinic receptors in human T cells
AU Fujii, Takeshi; Kawashima, Koichiro
CS Department of Pharmacology, Kyoritsu College of Pharmacy, Minato-ku, Tokyo, 105-8512, Japan
SO General Pharmacology (2000), 35(2), 71-75
CODEN: GEPHDP; ISSN: 0306-3623
PB Elsevier Science Inc.
DT Journal
LA English
AB Our earlier observations suggest that M3 muscarinic acetylcholine (ACh) receptors (mAChRs) are involved in Ca2+ signaling and regulation of c-fos gene expression in T lymphocytes. Here, we describe the effects of YM905, a novel M3 antagonist, on evoked Ca2+ signaling and c-fos gene expression in CEM human leukemic T cells. YM905 significantly inhibited increases in intracellular free Ca2+ evoked by 10 μM oxotremorine-M, an M1/M3 agonist (IC50=100 nM), and also inhibited 10 μM oxotremorine-M-induced upregulation of c-fos gene expression at 1 μM. These findings demonstrate that YM905 antagonizes the intracellular responses in T cells induced via mAChRs, possibly M receptors.
IT 242478-38-2, YM905
RL: PAC (Pharmacological activity); BIOL (Biological study)
(YM905 inhibits Ca2+ signaling and c-fos gene expression mediated via muscarinic receptors in human T cells)
RN 242478-38-2 CAPLUS
CN Butanedioic acid, compd. with (1S)-(3R)-1-azabicyclo[2.2.2]oct-3-yl 3,4-dihydro-1-phenyl-2(1H)-isoquinolinecarboxylate (1:1) (CA INDEX NAME)

CM 1

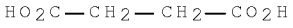
CRN 242478-37-1
CMF C23 H26 N2 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6
CMF C4 H6 O4

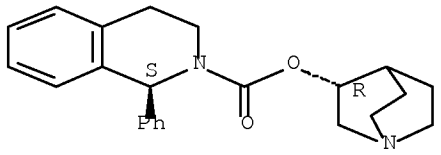


OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2001:552377 CAPLUS Full-text
DN 135:313448
TI Effects of YM905, a novel muscarinic M3-receptor antagonist, on experimental models of bowel dysfunction in vivo
AU Kobayashi, Seiji; Ikeda, Ken; Suzuki, Mami; Yamada, Toshimitsu; Miyata, Keiji
CS Pharmacology Laboratories, Institute for Drug Discovery Research, Yamanouchi Pharmaceutical Co., Ltd., Tsukuba, 305-8585, Japan
SO Japanese Journal of Pharmacology (2001), 86(3), 281-288
CODEN: JJPAAZ; ISSN: 0021-5198
PB Japanese Pharmacological Society
DT Journal
LA English
AB We investigated the effects of YM905 [(+)-(1S,3'R)-quinuclidin-3'-yl 1-phenyl-1,2,3,4-tetrahydroisoquinoline-2-carboxylate monosuccinate], a new orally active muscarinic M3-receptor antagonist, on bowel dysfunction in vivo using exptl. models that reproduce the symptoms present in irritable bowel syndrome (IBS). YM905 potently inhibited restraint stress-induced fecal pellet output in fed rats (ED50: 4.0 mg/kg) and diarrhea in fasted rats (ED50: 1.7 mg/kg), with similar potencies to the inhibition of bethanechol-, neostigmine- and nicotine-induced fecal pellet output in rats (ED50: 3.3, 7.9 and 4.5 mg/kg, resp.). YM905 also inhibited 5-hydroxytryptamine (5-HT)-, prostaglandin E2- and castor oil-induced secretory diarrhea in mice (ED50: 5.5, 14 and 6.3 mg/kg, resp.), but showed no significant effect on cholera toxin-induced intestinal secretion in mice. In addition, YM905 (3, 10 mg/kg) reversed morphine-decreased postprandial defecation in ferrets, a model of spastic constipation, whereas ramosetron, a 5-HT3-receptor antagonist, was not effective. The mode of YM905 action was similar to that of darifenacin, a selective M3-receptor antagonist, with equivalent potencies. By contrast, propantheline, an antimuscarinic drug that has been used for IBS, was much less potent. These results show that YM905 ameliorates a wide spectrum of bowel dysfunctions through the blockade of M3 receptors, suggesting its therapeutic potential for treating IBS.
IT 242478-37-1, YM 905

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of YM905 on exptl. models of bowel dysfunction)
RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

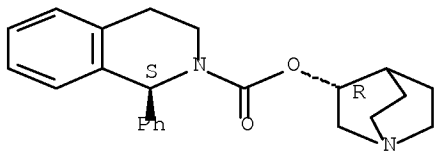


OSC.G 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2000:451981 CAPLUS Full-text
DN 133:317043
TI YM-905 (Yamanouchi Pharmaceutical Co Ltd)
AU Heading, Christine E.
CS Open University, Ruislip, HA4 7DD, UK
SO Current Opinion in Central & Peripheral Nervous System Investigational Drugs (2000), 2(3), 321-325
CODEN: COCDFA; ISSN: 1464-844X
PB PharmaPress Ltd.
DT Journal; General Review
LA English
AB A review with 23 refs. Yamanouchi is developing YM-905, a selective M3 muscarinic receptor antagonist, as a potential treatment for urinary incontinence and irritable bowel syndrome (IBS). It is in phase II trials in the US and Europe as a potential treatment for urinary incontinence and in phase I trials in Japan for IBS. Launch in the US and European markets is expected between 2003 and 2005. The drug shows a high affinity for the M3 receptor (Ki = 12 nM in rats) and effectively inhibits rhythmic bladder contractions without the common atropinic side effects such as dry mouth in humans. In preclin. studies, YM-905 (the succinate salt of the same free base of which YM-53705 is the monochloride salt) potently and competitively inhibited carbachol-induced contractions of guinea pig colon, with a pA2 value of 7.5. It was also shown to inhibit restraint stress-induced defecation and diarrhea over a dose range of 1-30 mg/kg. Preclin. studies have demonstrated that YM-53705 inhibited an increase in calcium and upregulated c-fos gene expression in a human T-cell line stimulated with oxotremorine. It has been suggested that YM-53705 modulates T-cell function via M3 receptors.
IT 242478-37-1P, YM 905
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(pharmacol. of YM 905 for treatment of urinary incontinence and irritable bowel syndrome)
RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-,

(3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

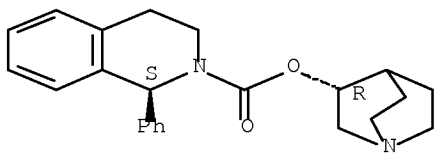
Absolute stereochemistry. Rotation (+).



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2000:433740 CAPLUS Full-text
DN 133:317413
TI Gastric cytoprotective activity of ilicic aldehyde in rats and mice
AU Donadel, O. J.; Maria, A.; Wendel, G.; Guerreiro, E.; Giordano, O.
CS Quimica Organica, INTEQUI-CONICET, Argent.
SO Molecules [Electronic Publication] (2000), 5(3), 462-464
CODEN: MOLEFW; ISSN: 1420-3049
URL: http://www.mdpi.org/molecules/papers/50300252.pdf
PB Molecular Diversity Preservation International
DT Journal; (online computer file)
LA English
AB Ilicic alc., a natural sesquiterpene, was previously converted to its aldehyde by Jones' oxidation The aldehyde prevented the formation of gastric mucosal lesions induced by EtOH and other necrotizing agents in mice and rats.
IT 242478-37-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gastric cytoprotective activity of ilicic aldehyde)
RN 242478-37-1 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



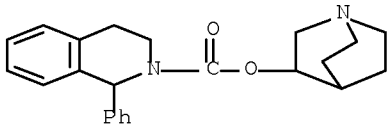
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1999:731705 CAPLUS Full-text
DN 132:202452
TI YM-905: treatment of urinary incontinence, muscarinic M3 antagonist
AU Mealy, N.; Castaner, J.
CS Prous Science, Barcelona, 08080, Spain
SO Drugs of the Future (1999), 24(8), 871-874

CODEN: DRFUD4; ISSN: 0377-8282
PB Prous Science
DT Journal; General Review
LA English
AB A review, with 7 refs., discussing the synthesis and the pharmacol. actions of the title compound
IT 180272-15-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(YM-905: treatment of urinary incontinence, muscarinic M3 antagonist)
RN 180272-15-5 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester, ethanedioate (1:1) (CA INDEX NAME)

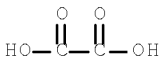
CM 1

CRN 180272-14-4
CMF C23 H26 N2 O2



CM 2

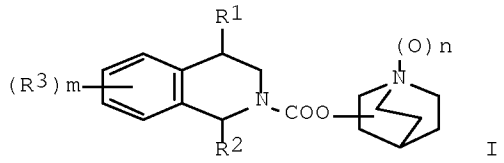
CRN 144-62-7
CMF C2 H2 O4



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:35996 CAPLUS Full-text
DN 128:114881
OREF 128:22529a,22532a
TI Preparation of quinuclidine-containing isoquinolines and muscarine M3 receptor antagonists containing them
IN Naito, Ryo; Takeuchi, Makoto; Okamoto, Yoshinori; Ikeda, Masaru; Isomura, Yasuo
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10007675	A	19980113	JP 1996-162221	19960621 <--
PRAI	JP 1996-162221		19960621		
OS	MARPAT 128:114881				
GI					



I

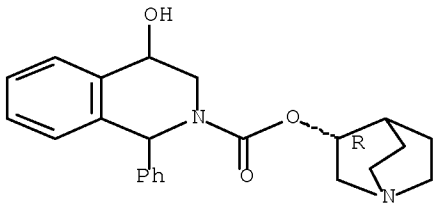
AB Isoquinolines I (R1 = OH, lower alkoxy, lower alkyl; R2 = aryl, cycloalkyl, heterocyclyl; R3 = halo, OH, lower alkoxy, CO2H, lower alkoxycarbonyl, lower acyl, etc.; m = 0-3; n = 0, 1) or their salts, useful as muscarine M3 receptor antagonists, are prepared (±)-Trans-1-phenyl-1,2,3,4-tetrahydro-4-isoquinolinol (0.28 g) was treated with 0.28 g (3R)-3-quinuclidinyl chloroformate.HCl at room temperature for 2.5 h to give 0.15 g trans-(1S,3'R,4S)- and trans-(1R,3'R,4R)-I (R1 = OH, R2 = Ph, R3 = H, n = 0). I was tested for in vitro muscarine receptor affinity and in vivo antagonistic activity.

IT 201660-36-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinuclidine-containing isoquinolines as muscarine M3 receptor antagonists)

RN 201660-36-8 CAPLUS

CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-4-hydroxy-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1996:516723 CAPLUS Full-text

DN 125:167804

OREF 125:31441a,31444a

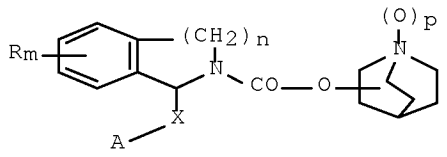
TI Preparation of new quinuclidine derivatives as muscarinic M3 receptor antagonists

IN Takeuchi, Makoto; Naito, Ryo; Hayakawa, Masahiko; Okamoto, Yoshinori; Yonetoku, Yasuhiro; Ikeda, Ken; Isomura, Yasuo

PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9620194	A1	19960704	WO 1995-JP2713	19951227 <--
W: AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2208839	A1	19960704	CA 1995-2208839	19951227 <--
CA 2208839	C	20060131		
AU 9643553	A	19960719	AU 1996-43553	19951227 <--
AU 695616	B2	19980820		
EP 801067	A1	19971015	EP 1995-942276	19951227 <--
EP 801067	B1	20030305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
CN 1171109	A	19980121	CN 1995-197088	19951227 <--
CN 1045601	C	19991013		
HU 77006	A2	19980302	HU 1997-1895	19951227 <--
HU 223778	B1	20050128		
RU 2143432	C1	19991227	RU 1997-112907	19951227 <--
JP 3014457	B2	20000228	JP 1996-520367	19951227 <--
JP 2000109481	A	20000418	JP 1999-291267	19951227 <--
PL 182344	B1	20011231	PL 1995-321019	19951227 <--
AT 233761	T	20030315	AT 1995-942276	19951227
ES 2193208	T3	20031101	ES 1995-942276	19951227
FI 9702775	A	19970822	FI 1997-2775	19970627 <--
FI 115631	B1	20050615		
NO 9703027	A	19970828	NO 1997-3027	19970627 <--
NO 318026	B1	20050124		
US 6017927	A	20000125	US 1997-860377	19970828 <--
US 6174896	B1	20010116	US 1999-312392	19990514 <--
PRAI JP 1994-327045	A	19941228		
JP 1996-520367	A3	19951227		
WO 1995-JP2713	W	19951227		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 125:167804
GI



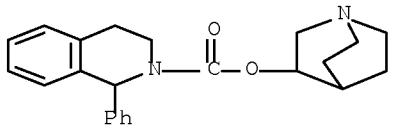
I

AB Quinuclidine derivs. I [ring A = optionally substituted aryl, cycloalkyl, cycloalkenyl, heteroaryl containing 1 to 4 heteroatoms selected from among oxygen, nitrogen and sulfur, or 5- to 7-membered saturated heterocycle; X = single bond or methylene; R = halo, hydroxy, lower alkoxy, carboxy, lower alkoxycarbonyl, lower acyl, mercapto, lower alkylthio, sulfonyl, lower

alkylsulfonyl, sulfinyl, lower alkylsulfinyl, sulfonamido, lower alkanesulfonamido, carbamoyl, thio-carbamoyl, mono- or di(lower alkyl)carbamoyl, nitro, cyano, amino, mono- or di(lower alkyl)amino, methylenedioxy, ethylenedioxy or lower alkyl optionally substituted by halogeno, hydroxy, lower alkoxy, amino or mono- or di(lower alkyl)amino; p = 0 or 1; m = integer of 1 to 3; n = integer of 1 or 2], their salts, N-oxides, or quaternary ammonium salts, having an antagonistic effect on muscarinic M3 receptors and are useful as a preventive or remedy for urol. diseases, respiratory diseases or digestive diseases, are prepared Thus, Et 1-phenyl-1,2,3,4-tetrahydro-2-isoquinolinecarboxylate (preparation given) was reacted with 3-quinuclidinol in toluene containing NaH at 140° for 2 days to give the title compound 3-quinuclidinyl 1-phenyl-1,2,3,4-tetrahydro-2-isoquinolinecarboxylate isolated as the oxalate salt. In an in vitro study, I had Ki values of 10-3 to 10-10 M against muscarinic M3 receptors.

IT 180272-14-4P 180272-15-5P 180272-16-6P
180272-23-5P 180272-24-6P 180272-25-7P
180272-28-0P 180272-29-1P 180468-37-5P
180468-38-6P 180468-39-7P 180468-40-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of new quinuclidine derivs. as muscarinic M3 receptor antagonists)

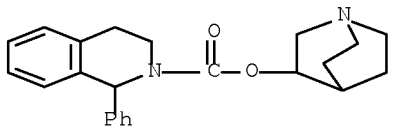
RN 180272-14-4 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)



RN 180272-15-5 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester, ethanedioate (1:1) (CA INDEX NAME)

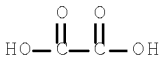
CM 1

CRN 180272-14-4
CMF C23 H26 N2 O2

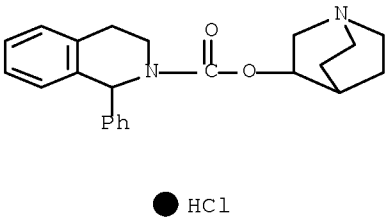


CM 2

CRN 144-62-7
CMF C2 H2 O4



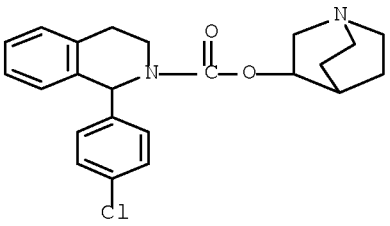
RN 180272-16-6 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, 1-azabicyclo[2.2.2]oct-3-yl ester, hydrochloride (1:1) (CA INDEX NAME)



RN 180272-23-5 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 1-(4-chlorophenyl)-3,4-dihydro-, 1-azabicyclo[2.2.2]oct-3-yl ester, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

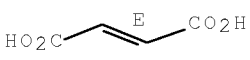
CRN 180272-22-4
CMF C23 H25 Cl N2 O2



CM 2

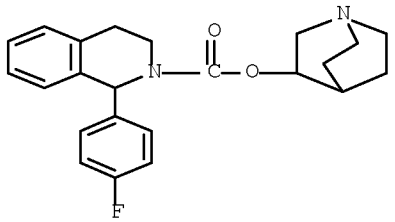
CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

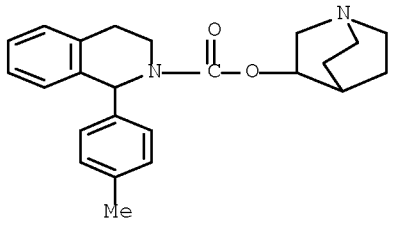


RN 180272-24-6 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 1-(4-fluorophenyl)-3,4-dihydro-,

1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)

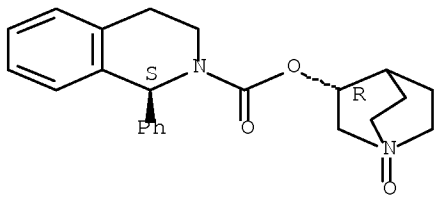


RN 180272-25-7 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-(4-methylphenyl)-, 1-azabicyclo[2.2.2]oct-3-yl ester (CA INDEX NAME)



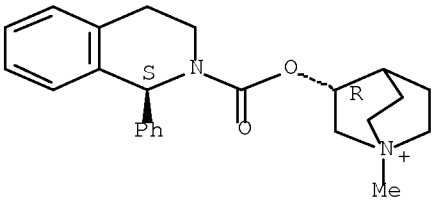
RN 180272-28-0 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-oxido-1-azabicyclo[2.2.2]oct-3-yl ester, (1S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 180272-29-1 CAPLUS
CN 1-Azoniabicyclo[2.2.2]octane, 3-[[[(1S)-3,4-dihydro-1-phenyl-2(1H)-isoquinolinyl]carbonyl]oxy]-1-methyl-, iodide (1:1), (3R)- (CA INDEX NAME)

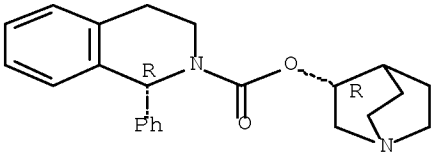
Absolute stereochemistry.



● I^-

RN 180468-37-5 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, hydrochloride (1:1), (1R)- (CA INDEX NAME)

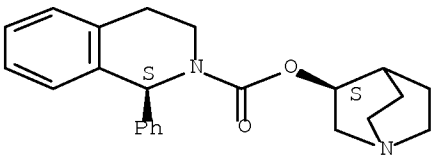
Absolute stereochemistry. Rotation (-).



● HCl

RN 180468-38-6 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3S)-1-azabicyclo[2.2.2]oct-3-yl ester, hydrochloride (1:1), (1S)- (CA INDEX NAME)

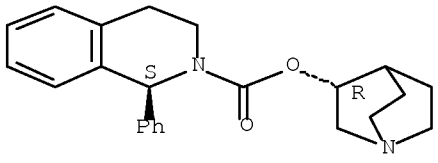
Absolute stereochemistry. Rotation (+).



● HCl

RN 180468-39-7 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3R)-1-azabicyclo[2.2.2]oct-3-yl ester, hydrochloride (1:1), (1S)- (CA INDEX NAME)

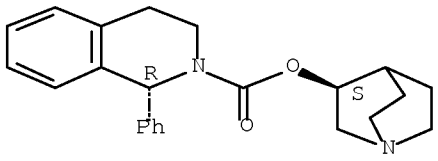
Absolute stereochemistry. Rotation (+).



● HCl

RN 180468-40-0 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-1-phenyl-, (3S)-1-azabicyclo[2.2.2]oct-3-yl ester, hydrochloride (1:1), (1R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



● HCl

OSC.G 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (50 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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STN INTERNATIONAL LOGOFF AT 10:53:17 ON 24 AUG 2009